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EXAMINER

GENACK, MATTHEW W

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/945,486	Applicant(s) SIDHU ET AL.	
	Examiner Matthew W. Genack	Art Unit 2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "60" has been used twice in Fig. 3.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "28", "30", and "32" of Fig. 1, "160", "184", and "192" of Fig. 2, "56", "60", and "62" of Fig. 3, "76", "78", and "79" of Fig. 4, "82", "88", "90", and "91" of Fig. 5, "92" and "94" of Fig. 6, "116" of Fig. 8, and "126" of Fig. 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: "114" in Line 5 of [0049] should be "124", and "10" in Line 8 of [0074] should be "12, 14".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 25 recites the phrase "as in Claim 1 wherein the step of caching packets...". There is insufficient antecedent basis for this phrase in Claim 25.

Examiner interprets Claim 25 as depending on Claim 24.

Claim 58 contains the incomplete sentence "search descriptor." in Line 4.

Examiner interprets Claim 58 such that these words are omitted.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2 and 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlsson *et. al.*, U.S. Patent Application Publication No. 2002/0085537.

Regarding Claim 1, Carlsson *et. al.* discloses a method for the delivery of messages to mobile terminals over wireless packet data networks, such as General Packet Radio Service (GPRS) networks (Abstract, [0001], [0009], Fig. 2). A tunneling protocol is used in the transfer of data between the GPRS-compatible mobile terminal

and the Serving GPRS Support Node, and in the registration of the mobile terminal and the corresponding determination of the identity of the subscriber associated with said mobile terminal (SGSN) ([0025], [0027], [0033], [0037], Fig. 2). The applications and services to which the mobile terminal is entitled are identified ([0030]).

Regarding Claim 2, Carlsson *et. al.* discloses that subscriber information is stored in the GPRS Home Location Register (HLR) ([0022]). The specific services that a subscriber is entitled to are listed in an application level International Mobile Group Identification (IMGI) ([0030]).

Regarding Claim 32, Carlsson *et. al.* discloses that messages normally transmitted to the Mobile Switching Center (MSC) are translated and sent to the GPRS Service Center (GPRS-SC), on their way to the mobile terminal ([0029], Fig. 3).

Claim 33 differs substantively from Claim 1 in that Claim 33 recites an apparatus and means for using said apparatus in the context of nearly identical limitations. Carlsson *et. al.* discloses the apparatuses that the aforementioned method pertains to.

Claim 34 differs substantively from Claim 2 in that Claim 34 recites an apparatus and means for using said apparatus in the context of nearly identical limitations. Carlsson *et. al.* discloses the apparatuses that aforementioned method pertains to.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson, U.S. Patent Application Publication 2003/0035438, in view of Hluchyj *et. al.*, U.S. Patent No. 6,282,193.

Regarding Claim 20, Larsson discloses a method for providing wireless data communication services to a mobile data device (Abstract, [0008], [0024], [0025] Lines 1-14, Fig. 1)). Data is exchanged between the mobile data device and the service provider station via a Point to Point Protocol (PPP), using an enhanced Generic Routing Encapsulation (GRE) mechanism, tunneled through an IP network ([0014]).

Larsson does not expressly disclose the step of transcoding the exchanged data from PPP over GRE over IP to GRE over IP.

Hluchyj *et. al.* discloses a remote access server and a method for using said remote access server in a packet network (Abstract, Column 1 Lines 61-63). The process of transcoding a signal in the context of protocols that include PPP and IP is disclosed (Column 3 Lines 14-15, 32-38, 43-55).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Larsson with the aforementioned concept from the Hluchyj *et. al.*, so that the method of the invention of Larsson is expanded to include the step of transcoding the exchanged data from PPP over GRE over IP to GRE over IP.

One of ordinary skill in the art would have been motivated to make this modification because it enhances compatibility between disparate communication networks.

Claim 21 differs substantively from Claim 20 in that in Claim 21, the transcoding step is transferred to a PPP conversion application. Larsson discloses that data packets are converted by means of a terminal node controllers (TNCs) ([0013]).

Claim 22 differs substantively from Claim 21 in that in Claim 22, GRE over IP is transcoded to IP. The reasoning that applied to the rejection of Claim 20 applies to the rejection of Claim 22.

Claim 23 differs substantively from Claim 22 in that in Claim 23, the transcoding step is transferred to a GRE conversion application. The reasoning that applied to the rejection of Claim 21 applies to the rejection of Claim 23.

10. Claims 3-4, 35-36, and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Laursen *et. al.*, U.S. Patent No. 5,805,804.

Regarding Claim 52, Carlsson *et. al.* discloses the means for the delivery of messages to mobile terminals over wireless packet data networks, such as General Packet Radio Service (GPRS) networks (Abstract, [0001], [0009], Fig. 2). A tunneling protocol is used in the transfer of data between the GPRS-compatible mobile terminal and the Serving GPRS Support Node, and in the registration of the mobile terminal and the corresponding determination of the identity of the subscriber associated with said mobile terminal (SGSN) ([0025], [0027], [0033], [0037], Fig. 2). The applications and services to which the mobile terminal is entitled are identified ([0030]).

Carlsson *et. al.* does not expressly disclose the use of a CODEC and an authentication application.

Laursen *et. al.* discloses a system for providing multimedia data (Abstract, Column 2 Lines 15-16, Column 3 Lines 6-7, Fig. 1). This system contains a codec that operates on tunneled data streams (Column 4 Lines 41-44, Column 9 Lines 17-25 and 52-64, Figs. 1-2). The system also offers an authentication service that enables a user to use the other system services after said user inputs the proper PIN (Column 19 Lines 25-41).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by incorporating a CODEC adapted to process tunneled data and an authentication application adapted to identify users from decoded tunneled data.

One of ordinary skill in the art would have been motivated to make these modifications because of the improvement in efficiency that CODECs offer and the security offered to subscribers when PINs are required to access services.

The rejection of Claim 53 is parallel to that of Claim 2.

Claim 54 differs substantively from Claim 52 in that in Claim 54, there is a proxy application adapted to coupling data packets between the mobile data device and a data source. Carlsson *et. al.* does not expressly disclose a proxy application.

Laursen *et. al.* discloses that a downstream manager serves as a proxy for the client (Column 18 Lines 18-37, Fig. 2).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* as previously modified

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by Laursen *et. al.* by including a proxy application for coupling data packets between the user and a data source.

One of ordinary skill in the art would have been motivated to make this modification because proxy applications provide users with privacy and security.

The rejections of Claims 3 and 35 are parallel to that of Claim 54.

Claim 4 recites the act of defining a set of characteristics for the proxy application from the aforementioned description of available data services.

Laursen *et. al.* discloses that the downstream manager (e.g. the proxy) is established by the connection service based on the data that has been requested (Column 16 Lines 16-21 and 39-47).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* as previously modified by Laursen *et. al.* by defining a set of characteristics for the proxy application from the aforementioned description of available data services.

One of ordinary skill in the art would have been motivated to make this modification so as to make more efficient use of the proxy application.

The rejection of Claim 36 is parallel to that of Claim 4.

11. Claims 5-6, 37-38, and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Laursen *et. al.*, further in view of Sharma *et. al.*, U.S. Patent No. 6,892,067.

Regarding Claim 5, neither Carlsson *et. al.* nor Laursen *et. al.* expressly discloses the practice of downloading a service menu.

Sharma *et. al.* teaches the practice of downloading service menus from remote SMS servers to wireless telephones (Column 1 Lines 15-29).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* as modified by Laursen *et. al.* by downloading a service menu from the proxy application to the wireless data device.

One of ordinary skill in the art would have been motivated to make this modification because the storage of service menus in the fixed infrastructure saves wireless data device memory, and in contexts wherein the range of services is dynamic rather than static, may be the only option available.

The rejections of Claims 37 and 55 are parallel to that of Claim 5.

Claim 6 differs substantively from Claim 5 in that in Claim 6, a billing file is opened wherein services that have been provided to the user are logged. Laursen *et. al.* discloses that billing records and usage data are stored by the system (Column 6 Lines 24-28).

The rejections of Claims 38 and 56 are parallel to that of Claim 6.

12. Claims 7-13, 39-45, and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Laursen *et. al.*, further in view of Sharma *et. al.*, further in view of Ryan *et. al.*, U.S. Patent Application Publication 2002/0130899.

Regarding Claims 7-13, neither Carlsson *et. al.*, nor Laursen *et. al.*, nor Sharma *et. al.* expressly discloses the inclusion of an e-mail selection option and a search selection option in a services menu.

Ryan *et. al.* discloses menu options for services that include "Free Email" and "Site Search" ([0067], Fig. 2(B)).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.*, as modified by Laursen *et. al.*, as modified by Sharma *et. al.* by providing an e-mail selection option and a search selection option in the downloaded services menu, downloading email upon selection of said e-mail selection option, incrementing the billing file after each downloaded e-mail, uploading a search descriptor from the user to a search engine after the user enters a search term, and incrementing the billing file after each search.

One of ordinary skill in the art would have been motivated to make these modifications because e-mail and search services are in high demand by the users of networked packet data devices.

The rejections of Claims 39-45 are parallel to those of Claims 7-13, respectively. The rejection of Claim 57 is parallel to that of Claim 7, and the rejection of Claim 58 is parallel to that of Claim 10.

13. Claims 14-15 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Laursen *et. al.*, further in view of Sharma *et. al.*, further in view of Ryan *et. al.*, further in view of McCartney *et. al.*, U.S. Patent Application Publication 2003/0033147.

Regarding Claims 14-15, neither Carlsson *et. al.*, nor Laursen *et. al.*, nor Sharma *et. al.*, nor Ryan *et. al.* expressly discloses the deletion of downloaded HTML data.

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McCartney *et. al.* discloses the deletion of HTML data from a personal electronic device (Abstract, [0048], [0054]).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.*, as modified by Laursen *et. al.*, as modified by Sharma *et. al.*, as modified by Ryan *et. al.* by deleting some downloaded HTML data, said data being defined as advertising data.

One of ordinary skill in the art would have been motivated to make these modifications because it is common for users to want to filter unwanted advertisements, also known as "spam," from their communication devices.

The rejections of Claims 46-47 are parallel to those of Claims 14-15, respectively.

14. Claims 16-19 and 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Larsson, further in view of Hluchyj *et. al.*

The rejections of Claims 16-19 and 48-51 are parallel to the rejections of Claims 20-23, respectively.

15. Claims 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Laursen *et. al.*, further in view of Sharma *et. al.*, further in view of Ryan *et. al.*, further in view of Larsson, further in view of Hluchyj *et. al.*

The rejections of Claims 59-60 are parallel to the rejections of Claims 20 and 22, respectively.

16. Claims 24-26 and 30-31 are rejected under 35 U.S.C. 103(a) as being

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unpatentable over Carlsson *et. al.* in view of Afek *et. al.*, U.S. Patent Application Publication 2002/0083175.

Regarding Claims 24-26, Carlsson *et. al.* does not expressly disclose the caching of packets and web pages.

Afek *et. al.* discloses a method of filtering data at a node in a distributed network, such as the Internet, so as to defend against denial of service attacks (Abstract, [0002]). In the context of this method, HTTP/TCP packets are forwarded to a cache proxy ([0325]).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by caching TCP packets and web pages bound for the wireless data device from a source web site.

One of ordinary skill in the art would have been motivated to make these modifications because they could potentially enhance the security of the user's wireless data device.

Regarding Claims 30-31, Carlsson *et. al.* does not expressly disclose the filtering and deletion of packets for the purpose of defending against attacks.

Afek *et. al.* discloses a method of filtering data at a node in a distributed network, such as the Internet, so as to defend against denial of service attacks (Abstract, [0002]). In the context of this method, an attack alert is generated by firewall equipment when an anomalous pattern of traffic is detected ([0282]). Non-essential packets, or packets that meet certain attack criteria, may be discarded ([0021], [0255], [0256], [0301]).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by using firewall protection to filter and delete packets that are involved in a malicious attack on the wireless data device.

One of ordinary skill in the art would have been motivated to make these modifications so as to provide for the security of the wireless data device.

17. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Hluchyj *et. al.*

Carlsson *et. al.* does not expressly disclose the transcoding of packets.

Hluchyj *et. al.* discloses a remote access server and a method for using said remote access server in a packet network (Abstract, Column 1 Lines 61-63). The process of transcoding a signal in the context of protocols that include PPP and IP is disclosed (Column 3 Lines 14-15, 32-38, 43-55).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by transcoding packets in the fixed wireless infrastructure.

One of ordinary skill in the art would have been motivated to make this modification because it enhances compatibility between disparate communication networks.

18. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson *et. al.* in view of Coleman *et. al.*, U.S. Patent No. 5,844,620.

Regarding Claim 28, Carlsson *et. al.* does not expressly disclose the reformatting of images.

Coleman *et. al.* discloses the reformatting of a video image (Column 21 Lines 1-7, Fig. 7) in the context of a method for displaying an interactive television program guide (Abstract, Column 5 Lines 62-65).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by reformatting images in the fixed wireless infrastructure.

One of ordinary skill in the art would have been motivated to make this modification because wireless data devices tend to have displays that are significantly smaller than personal computer displays, and therefore, reformatting the images to be displayed on a typical wireless data device is appropriate.

Regarding Claim 29, Carlsson *et. al.* does not expressly disclose a parental control feature.

Coleman *et. al.* discloses a parental control feature (Column 22 Lines 51-57, Fig. 11), in the context of a method for displaying an interactive television program guide (Abstract, Column 5 Lines 62-65).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Carlsson *et. al.* by providing a parental control feature which filters data packets in the fixed wireless infrastructure.

One of ordinary skill in the art would have been motivated to make this modification because there is a significant amount of content that is available via the

Internet that a large percentage of parents would not want their children to have access to.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew Genack

Examiner

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21 July 2005



RONALD G. FOSTER
PRIMARY PATENT EXAMINER